

USGS-NPS Vegetation Mapping Program
Effigy Mounds National Monument

Andropogon gerardii* - *Sorghastrum nutans* - (*Sporobolus heterolepis*) - *Liatris* spp. - *Ratibida pinnata
Herbaceous Vegetation

COMMON NAME	Big Bluestem - Yellow Indiangrass - (Prairie Dropseed) - Blazingstar species - Gray-head
SYNONYM	Prairie Coneflower Herbaceous Vegetation
PHYSIOGNOMIC CLASS	Central Mesic Tallgrass Prairie
PHYSIOGNOMIC SUBCLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural Temperate or subpolar grassland (V.A.5.N)
FORMATION	Tall sod temperate grassland (V.A.5.N.a)
ALLIANCE	ANDROPOGON GERARDII - (SORGHASTRUM NUTANS) HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Tall sod temperate grassland

CONCEPT SUMMARY

Globally

This mesic tallgrass prairie grassland community is found primarily in the glaciated central midwestern United States. Stands occur on silty clay loams and silty loams. Soils are typically derived from deep (>100 cm) silty clay and silt loam glacial till or unaltered loess, except for those in the Driftless Area. Soil drainage is intermediate, and nutrient content is high. The pH ranges from slightly acid to circumneutral. Topography varies from level to moderately sloping on uplands of glacial outwash and till plains. This is a tallgrass mixed herbaceous community dominated by perennial C4 bunch and sod grasses. Trees are infrequent to absent. The height of the dominant plants ranges from 0.5–2.0 m. Cover is high, typically 85–95%. Forb species composition varies more than grass composition from site to site. *Andropogon gerardii*, *Symphyotrichum ericoides* (= *Aster ericoides*), *Dalea candida*, *Eryngium yuccifolium*, *Helianthus pauciflorus* ssp. *pauciflorus*, *Liatris pycnostachya*, *Liatris spicata*, *Ratibida pinnata*, *Rosa carolina*, *Schizachyrium scoparium*, *Sporobolus heterolepis*, *Oligoneuron rigidum* (= *Solidago rigida*), and *Sorghastrum nutans* are abundant throughout this community's range. *Amorpha canescens*, a subshrubby species, and *Salix humilis* are also typically present.

RANGE

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This community occurs on gently sloping uplands that were previously grazed pasturelands.

Globally

This mesic tallgrass prairie grassland community is found primarily in the glaciated central midwestern United States, ranging from western Ohio and Michigan west to east-central Minnesota, south to northern Missouri, and east to Indiana.

ENVIRONMENTAL DESCRIPTION

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This community type is represented in the North and South Units where previously grazed lands have been replanted with a prairie mix similar to this natural type.

Globally

Soils are characteristically deep (>100 cm) silty clay loams and silty loams, which occur in the glaciated portions of the Midwest. Soils are derived from glacial till or unaltered loess, or are in the Driftless Area. Soil drainage is intermediate and nutrient content is high. The pH ranges from slightly acid to circumneutral. Topography varies from level to moderately sloping on uplands of glacial outwash and till plains.

MOST ABUNDANT SPECIES

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Stratum

GRAMINOID

FORB

Species

Andropogon gerardii, *Sorghastrum nutans*

Lespedeza capitata, *Solidago canadensis*

Globally

SHRUB

GRAMINOID

FORB

Rosa carolina

Andropogon gerardii, *Schizachyrium scoparium*, *Sorghastrum nutans*, *Sporobolus heterolepis*

Eryngium yuccifolium, *Helianthus pauciflorus* ssp. *pauciflorus*, *Symphyotrichum ericoides*

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CHARACTERISTIC SPECIES

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Andropogon gerardii, *Sorghastrum nutans*, *Echinacea pallida*, *Liatris aspera*, *Monarda fistulosa*

Globally

Andropogon gerardii, *Schizachyrium scoparium*, *Sorghastrum nutans*, *Sporobolus heterolepis*, *Eryngium yuccifolium*, *Liatris pycnostachya*, *Silphium laciniatum*

VEGETATION DESCRIPTION

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Prairie species have been planted by the park service where relatively large open pastures previously occupied ridgetops. Both the South and North Units have several acres of planted prairies, which are managed through controlled burns.

Globally

This is a tallgrass mixed herbaceous community dominated by perennial C4 bunch and sod grasses. Trees are rare to absent. The height of the dominant plants ranges from 0.5–2.0 m. Cover is high, 85–95% is typical. Ninety-five percent of the plant species are perennial. Forb species composition varies more than grass composition from site to site. *Andropogon gerardii*, *Symphyotrichum ericoides* (= *Aster ericoides*), *Dalea candida*, *Eryngium yuccifolium*, *Helianthus pauciflorus* ssp. *pauciflorus*, *Ratibida pinnata*, *Rosa carolina*, *Schizachyrium scoparium*, *Sporobolus heterolepis*, *Oligoneuron rigidum* (= *Solidago rigida*), and *Sorghastrum nutans* are abundant throughout this community's range. *Amorpha canescens*, a subshrub species, and *Salix humilis* are also typically present.

OTHER NOTEWORTHY SPECIES

CONSERVATION RANK G1G2. This community has nearly been eliminated from its former range. Most former sites have been converted to cropland, pasture, or development. Others are succeeding to forest or woodland in the absence of fire. Many remaining sites are along rights-of-way (roads, railroads, utilities) and long term viability is problematic.

DATABASE CODE C EGL002203

COMMENTS

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Globally

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